

12

# EUROPEAN PATENT APPLICATION

21 Application number: 88500093.5

51 Int. Cl.4: A 47 K 11/10

22 Date of filing: 14.10.88

30 Priority: 22.10.87 ES 8703014

43 Date of publication of application:  
26.04.89 Bulletin 89/17

84 Designated Contracting States:  
AT BE CH DE ES FR GB IT LI NL SE

71 Applicant: Adduci Aurelio, Salvatore  
 Dr. Roux 127  
 E-08017 Barcelona (ES)

Vergés Roviralta, Jesus  
 Po. Maluquer 10  
 E-08970 Sant Joan Despi (Barcelona) (ES)

72 Inventor: Adduci Aurelio, Salvatore  
 Dr. Roux 127  
 E-08017 Barcelona (ES)

Vergés Roviralta, Jesus  
 Po. Maluquer 10  
 E-08970 Sant Joan Despi (Barcelona) (ES)

74 Representative: Curell Sunol, Jorge et al  
 c/o Dr. Ing. M. Curell Sunol I.I. S.L. Passeig de Gràcia 65  
 bis  
 E-08008 Barcelona (ES)

54 Sanitary utensil.

57 The utensil comprises a stem (1) serving as a handle, having at one end thereof a scrubbing member (2) as an element extended from the stem (1) itself or as an independent coupled member, such that at least the scrubbing member, in the form of strips, fibres, spatula or sponge, is disposable in the toilet after cleaning use, for decomposition and disposal by the water. When the stem is not decomposable, it is disposed of in a conventional rubbish container.

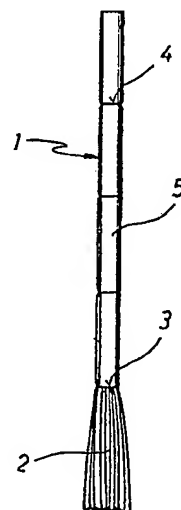


FIG. 2

## Description

## SANITARY UTENSIL

The present invention relates to a sanitary utensil for the hand cleaning of toilets having a flushing system.

Brushes for cleaning toilet bowls after each use are known and, in principle, they are designed for an indefinite duration.

These brushes, as is obvious, do not offer adequate sanitary conditions, although they are apparently externally clean, since larger or smaller amounts of remains or particles of stools from previous uses remain adhered thereto and are scarcely visible. Furthermore, it is not easy and effective to sanitize such brushes after each use, mainly because it would require a personal service not always obtainable.

On the other hand, above all in public establishments in general, there is a certain degree of apprehension against using brushes, since they are successively used by the various unknown users, for which reason they are deemed to be a repulsive, rather undesirable article.

At home, part of the apprehension against these brushes disappears, but the drawbacks of the lack of hygiene, leading to their disuse, subsist.

The above reasons highlight the serious limitations or drawbacks of the usual brushes, whereby there is appreciated the desirability of eliminating them and replacing them with another type of utensil, capable of overcoming the above drawbacks.

This is achieved with a sanitary utensil, which is characterised in that it comprises a stem and a scrubbing member, the end of the stem and the scrubbing member being mutually connected in such a way as to allow the said stem and scrubbing member to be readily separated, said stem being generally rigid and adapted to be held and at least said scrubbing member being adapted to decompose by impregnation with the water contained in the toilet and be disposed of through the said flushing system.

Further details and characteristics of the invention will be appreciated from the following description, with reference to the accompanying drawings, in which:

Figure 1 is a perspective schematic view of an elementary embodiment of the utensil of the invention;

Figure 2 is a schematic elevation view of the same utensil, provided with means for breaking it into portions;

Figure 3 is a schematic view of the utensil broken into portions after use.

In the embodiment described, the utensil comprises a stem 1 for use as a handle and having at one end a scrubbing member 2 which may be an extension of the stem 1 and which is formed by a division in the form of longitudinal strips of an end portion of the stem.

In another embodiment, the scrubbing member 2 may be an insert, i.e. forming an independent body

from the stem attached to one end 3 of the shaft. The scrubbing member may comprise a bundle of strips or fibres in the form of a brush or spatula, or a sponge material body. Both members are connected in such a way as to allow them to be easily separated apart and this connection may be formed by a weakened portion where the connection is broken apart.

This connecting area may also comprise an operable assembly device, i.e. mating means on the stem and on the scrubbing member, allowing one scrubbing member to be replaced by another, as a spare part, for one same stem.

In any case, at least the scrubbing member 2 may be decomposed or disintegratable in the water for self destruction, whereby it will be made of cellulosic material or a disintegratable resin. It is particularly contemplated that the scrubbing member be made of 100% cellulosic tissue paper weighing between 15 and 30 g/m<sup>2</sup>.

The stem 1 will also preferably be made from a material which may decompose or disintegrate in the water. In this case, it is also preferable that it be made of 100% cellulosic tissue paper having a weight of from 15 to 30 g/m<sup>2</sup>. The stem formed with this paper will have a plurality of layers providing sufficient thickness for it to be handled, without an excessive thickness hindering its decomposition.

It will furthermore be provided with weakened areas comprised of annular slots 4 adapted to facilitate manual destruction into portions 5, after the use of the utensil, for throwing in the toilet and subsequent decomposition like the scrubbing member 2. In a further embodiment, said weakened areas may consist of recesses, orifices or any other equivalent solution.

If only the scrubbing member 2 is thrown into the water, after separation from the stem 1, the stem will be disposed of separately as rubbish, unless it is used indefinitely, as said above, allowing the fitting of an exchange scrubbing member 2. It is suggested that it be formed from cardboard having a weight of 285 to 400 g/m<sup>2</sup>, without other possibilities being excluded.

The said stem 1 may be formed as a compact rod, as a spiral or as a tubular member, subject always to the above conditions with regard to the different forms of connection to the scrubbing member 2.

In any case, the final objective of this utensil is to be disposable, allowing it to be used for the contemplated cleaning function and subsequent decomposition and disposal, thereby achieving the desirable hygiene and aesthetic factors.

From a financial point of view, this utensil is particularly advantageous for the fact that it allows the use of low cost material, possibly recycled as is the case of paper which may be used for the different component elements of the utensil.

**Claims**

1.- A sanitary utensil, for the manual cleaning of toilets having a flushing system, characterised in that it comprises a stem (1) and a scrubbing member (2), one end of the stem (1) and the scrubbing member (2) being mutually connected in such a way as to allow the said stem (1) and scrubbing member (2) to be readily separated, said stem (1) being generally rigid and adapted to be held and at least said scrubbing member (2) being adapted to decompose or disintegrate by impregnation with the water contained in the toilet and be disposed of through the said flushing system.

2.- The utensil of claim 1, characterised in that the scrubbing member (2) is formed by 100% cellulosic tissue paper having a weight lying between 15 and 30 g/m<sup>2</sup>.

3.- The utensil of claim 1, characterised in that the scrubbing member (2) is an extension of the stem (L) and is formed by a division in the form

of longitudinal strips of an end portion of the stem.

4.- The utensil of claim 1, characterised in that the scrubbing member (2) is an independent element from the stem (1).

5.- The utensil of claim 4, characterised in that the scrubbing member (2) is a sponge material.

6. The utensil of claim 1, characterised in that said connection allowing easy separation comprises a weakened zone (3).

7.- The utensil of claim 1, characterised in that said connection allowing easy separation comprises an operable assembly arrangement.

8.- The utensil of claim 1, characterised in that said stem (1) is provided with a plurality of weakened areas (4) facilitating manual breakage of the stem.

9.- The utensil of claim 8, characterised in that said weakened areas (4) comprise annular slots.

10.- The utensil of claim 1, characterised in that said stem (1) is formed by a plurality of layers of 100% cellulosic tissue paper having a weight lying between 15 and 30 g/m<sup>2</sup>.

5

10

15

20

25

30

35

40

45

50

55

60

65

3

FIG.1

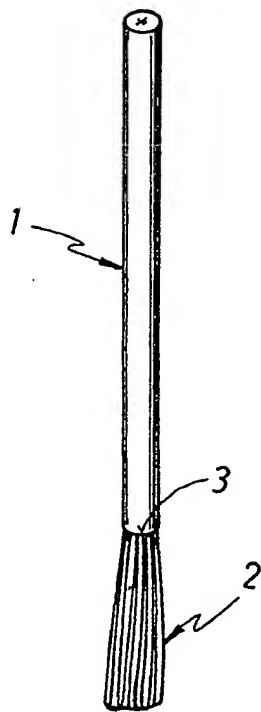


FIG.2

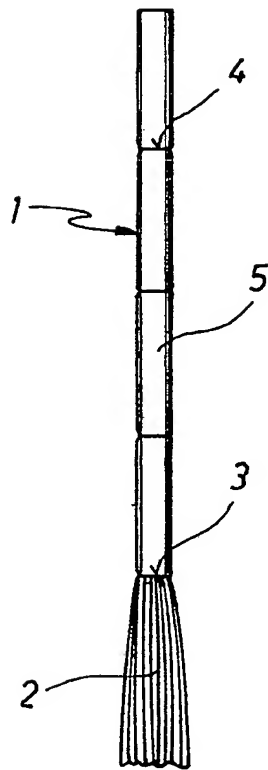
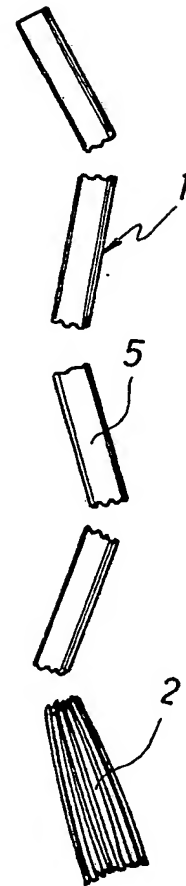


FIG.3





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	DE-A-2 617 451 (PETERSSON) * Page 7, lines 7-25; page 8, lines 1-25; page 9, lines 1,2; figures 1-5 *	1,2,4	A 47 K 11/10
A	GB-A-1 374 272 (JOHNSON) * Page 1, lines 59-90; page 2, lines 1-74 *	1,2	
A	US-A-4 522 524 (GREEN) * Column 3, lines 17-68; column 4, lines 1-68; column 5, lines 1-27; figures 1-7 *	3	
A	US-A-4 030 199 (RUSSELL) * Column 2, lines 49-68; column 3, lines 1-45; column 4, lines 1-9; figures 1-6 *	6	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			A 47 K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23-12-1988	Examiner SCHOLS W.L.H.
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			